

## Can't create Flow Accum. Grid

Posted by dmontes - 2009/02/22 21:01

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I am trying to create the Flow Acc. Grid.

Let me run my steps by you and see what I am doing wrong.

1) Create the fill DEM using my 30mDEM. Worked fine.

2) Create the Flow Direction Grid from the filled elevation grid (fillelev\_) Worked fine.

3) I trying to create the Flow accumulation grid from the Flow Direction Grid. Is that correct? I have tried several times and it says it creating it and it never finishes. I've let it run for up to an hour because I wasn't sure about the runtime. Approximate runtimes would be helpful in your help manual.

Last question, what processes can I look for in Task Manager when I'm trying to do tasks in AGWA, to validate that something is working..

Thanks!

Danielle Montes

Santa Fe National Forest

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## Re:Can't create Flow Accum. Grid

Posted by sacyadav - 2009/02/23 02:26

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I am sachindra i am also using same i.e agwa for my thesis. I have also tried this same problem with me i have tried this for the data of clorado it works fine with that data. the problem may be with the size of the basin if it is large basin it takes lots of time.

follow these steps

whilie creating the flow direction grid be patient and do not run any other programme and also do not mimimize the window.

give time to work for the flow direction grid

if possible use dem data for required portion only.

thank You

sachindra

I am from Nepal and please reply me. I have some question to ask.

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## Re:Can't create Flow Accum. Grid

Posted by dmontes - 2009/02/23 03:17

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Sachindra,

I never thought about clipping the DEM, that's a great idea. There's really no reason for me to do the entire DEM. I will try that. I'm still not sure whether I am supposed to create the Flow Accumulation grid

from the Flow Direction grid or from the Filled (depressionless) DEM. Thank you! Good luck on your thesis!

Danielle

Santa Fe, New Mexico, USA

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## Re:Can't create Flow Accum. Grid

Posted by isburns - 2009/02/25 23:07

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Hi Danielle,

Are you using AGWA or the Spatial Analyst toolbox in ArcToolbox to create the filled DEM, flow direction grid, and flow accumulation grid. It actually doesn't matter which you use because the end product is the same, but the answer to your question is slightly different for each.

The flow accumulation grid is created from the flow direction grid. In the Flow Accumulation tool in ArcToolbox, you are only asked to provide the flow direction grid. In AGWA, you must supply the filled DEM in the DEM tab and the flow direction grid in the FDG tab before clicking the Create button on the FACG tab. As an aside, your flow direction grid should only have values of 1, 2, 4, 8, 16, 32, 64, and 128 if it was created from a filled DEM. If it has any values other than that, it was created with an unfilled DEM.

Regarding runtime, it will vary significantly depending on your processor speed, RAM, the resolution of the DEM, and the extent of the DEM. Here is an example on a 10m DEM with an extent of 7600 square miles.

computer:

- Pentium 4 2.8 Ghz

- 2 gigs of RAM

- Windows XP

- ArcGIS 9.3 (which has much improved/faster filling routines than previous versions)

filling DEM:

- 9 minutes 30 seconds

flow direction grid

- 26 minutes 36 seconds

flow accumulation grid

- it's been running 5+ hours and isn't complete yet.

I think, but I'm not certain, raster creation processes also slow down when there is limited hard drive space, which is probably a contributing factor in my case.

shea

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